United States Environmental Protection Agency
Region V
POLLUTION REPORT

Date: Wednesday, August 19, 2009
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Subject: Plainwell No. 2 Dam
Plainwell, MI
Latitude: 42.4279865
Longitude: -85.6292009

POLREP No.:	1	**Site #:**	059B
Reporting Period:	08/05/2009-08/19/2009	**D.O. #:**	
Start Date:	8/5/2009	**Response Authority:**	CERCLA
Mob Date:	8/5/2009	**Response Type:**	Time-Critical
Completion Date:	1/1/0001	**NPL Status:**	NPL
CERCLIS ID #:		**Incident Category:**	Removal Action
RCRIS ID #:		**Contract #**	

Site Description

Former industrial and waste water treatment practices from approximately the 1950s to the mid-1970s, released polychlorinated biphenyls (PCB) into the Kalamazoo River in southwest Michigan. At least one source of the PCB was a result of paper mills in the Kalamazoo, Michigan area processing/de-inking carbonless copy paper containing PCB. These paper mills released PCB from their waste water into the Kalamazoo River system, some of which deposited in the area of the river known as the Plainwell Impoundment (which was created as a result of the building of a hydroelectric dam on the Kalamazoo River in the early 1900s).

Beginning in 2007 and continuing through 2008, investigations in Area 1 of the Kalamazoo River OU, including Plainwell Dam #2, were conducted as part of the Supplemental Remedial Investigation/Feasibility Study (SRI/FS). Phase 1 of that work involved the delineation of frequently inundated areas of the floodplain upstream of Plainwell Dam #2. Phase 2 of the investigation involved the sampling of Plainwell Dam #2. Results of the Phase 2 investigation of Plainwell Dam #2 found elevated levels of PCBs in bank and floodplain soils and, to a limited extent, in in-stream sediment. Samples were collected at 94 locations from a uniform grid in the floodplain, including in-stream islands. A total of 302 individual samples were collected from the floodplain, and total PCB concentrations ranged from non-detect to 60 milligrams per kilogram (mg/kg). Bank soil samples were collected from 78 locations. A total of 265 samples were analyzed for PCBs, with total PCB concentrations

ranging from non-detect to 45 mg/kg. Sediment samples were collected from 60 locations, resulting in 267 samples analyzed for PCBs. PCB concentrations in sediment ranged from non-detect to 100 mg/kg. A summary of the investigation results is presented in the Plainwell No. 2 Conceptual Design Report.

On December 10 and 11, 2008, MDEQ collected 30 sediment cores and 18 bank cores. A total of 50 individual sediment and 25 soil samples were analyzed for PCBs. Total PCB concentrations in sediment ranged from non-detect to 80.2 mg/kg. Total PCB concentrations in soil ranged from non-detect to 80.5 mg/kg.

The Allied Paper Inc./Portage Creek/Kalamazoo River Superfund Site (Site) encompasses the Kalamazoo River from Morrow Dam to Lake Michigan and approximately 3 miles of Portage Creek to the Kalamazoo River. The Plainwell Dam #2 (Site) is located approximately 3.5 miles upstream of the former Plainwell Dam in the Township of Gun Plain, T 1N, R 11 W, in portions of Sections 32 and 33 upstream to the Penn Central Railroad Bridge.

On June 8, 2009, an Administrative Order on Consent (AOC) was entered into between U.S. EPA and Georgia-Pacific, LLC, whereby, Georgia-Pacific agrees to conduct a time-critical removal action at the Site. The response actions include dredging and/or excavation of sediment, riverbank soils and floodplain soil, containment, monitoring, water treatment, stabilization and off-Site disposal of excavated material in accordance with federal PCB regulations at 40 C.F.R. Â§ 761.61. The response activities will require approximately 200 on-Site working days to complete, and will result in the removal of approximately 12,000 cubic yards of waste material, containing approximately 89% of the PCBs in the Plainwell Dam #2.

Additional site description and history can be found in the July 2009 Plainwell No. 2 Dam Area Time-Critical Removal Action Design Report, the June 8, 2009, Administrative Settlement Agreement and Order on Consent for Removal Action, the June 8, 2009, Time-Critical Removal Action Memorandum, and other Administrative Record documents.

Current Activities

Between June 8, 2009 and August 5, 2009, representatives of ARCADIS obtained access from property owners and finalized the design document. On August 5, 2009, Arcadis and contractors mobilized equipment and personnel to the site to conduct site preparation activities such as establishing project support area, clearing and grubbing and access development including railroad crossing enhancement.

Planned Removal Actions

The primary focus of the TCRA activities will be the removal and stabilization of targeted river banks in the Plainwell No. 2 Dam Area along with the excavation of a sediment deposit in the oxbow feature. The TCRA encompasses the following removal actions related to the PCB-impacted sediments and soils in the Plainwell No. 2 Dam Area:

1. Stem the potential loading of PCBs to the Kalamazoo River from river banks in the

Plainwell No. 2 Dam Area.

2. Removal of a defined area of sediments at the mouth of and along the western side of the former oxbow channel which yielded samples with elevated PCB concentrations.

3. Removal of PCB-containing bank soils, with bank cutbacks to stable slopes and backfill of the removal areas to original grade in the majority of areas. Some areas will not be fully backfilled to encourage redevelopment of native habitat.

3. Disposal of PCB-impacted sediments and soils in licensed commercial landfills.

4. Re-vegetating the excavated areas with native plant species, and maintaining appropriate monitoring during and after the removal activities. Outside of the monitoring requirements, these activities are anticipated to require two construction seasons to complete.

Excavation activities are scheduled to begin in early September.

Next Steps

Subsequent to completion of the removal action and through the Superfund remedial process, Region 5 will complete its evaluation of the risks to human health and the environment presented by the presence of PCBs within the first reach of the Kalamazoo River OU of the Site (which includes the Plainwell Dam #2). This evaluation will consider data collected and analyses performed as part of the removal action described in this Action Memorandum. U.S. EPA will then issue a Record of Decision (ROD) for the entire first reach of the Kalamazoo River OU (i.e. Morrow Dam to the Plainwell Dam or Area 1) and, as part of that ROD, will determine whether additional response actions are necessary within the Plainwell Dam #2 to address risks to human health and the environment not addressed through the time-critical removal process.

Key Issues

The progress of excavation activity is based on weather conditions.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
Intramural Costs				
Total Site Costs	$0.00	$0.00	$0.00	0.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at

final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

www.epaosc.org/PlainwellNo2Dam